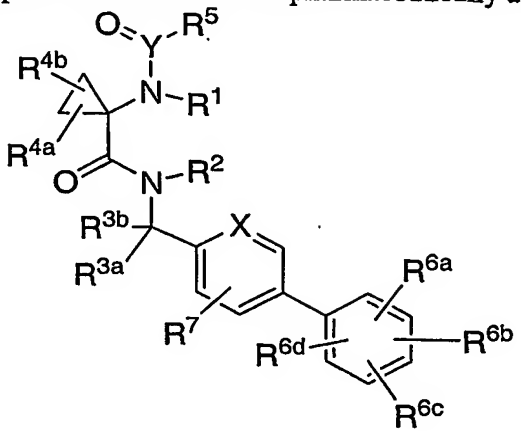
WHAT IS CLAIMED IS:

1. A compound of formula I and pharmaceutically acceptable salts thereof:



I

wherein

$R^1$ and $R^2$ are independently selected from hydrogen and $C_{1-4}$ alkyl;

$R^{3a}$ and $R^{3b}$ are independently selected from hydrogen and $C_{1-4}$ alkyl optionally substituted with 1 to 5 halogen atoms;

$R^{4a}$ and $R^{4b}$ are independently selected form hydrogen, halogen, and $C_{1-4}$ alkyl optionally substituted with 1 to 4 groups selected from halogen, $OR^a$, $OC(O)R^a$, $S(O)_kR^d$, $OS(O)_2R^d$, and $NR^1R^2$, or $R^{4a}$ and $R^{4b}$ together with the carbon atom to which they are both attached form an exo-cyclic methylene optionally substituted with 1 to 2 groups selected from $C_{1-4}$ alkyl optionally substituted with 1-5 halogens and $C_{1-4}$ alkyloxy;

$R^5$ is selected from (1) $C_{1-6}$ alkyl optionally substituted with 1 to 5 groups independently selected from halogen, nitro, cyano, $OR^a$, $SR^a$, $COR^a$, $SO_2R^d$, $CO_2R^a$, $OC(O)R^a$, $NR^bR^c$, $NR^bC(O)R^a$, $NR^bC(O)_2R^a$, $C(O)NR^bR^c$, $C_{3-8}$ cycloalkyl, (2) $C_{3-8}$ cycloalkyl optionally substituted with 1 to 5 groups independently selected from halogen, nitro, cyano and phenyl, (3) $C_{3-6}$ alkynyl, (4) $C_{2-6}$ alkenyl optionally substituted with hydroxyethyl, (5) $(CH_2)_k$-aryl optionally substituted with 1 to 3 groups independently selected from halogen, nitro, cyano, $OR^a$, $SR^a$, $C(O)_2R^a$, $C_{1-4}$ alkyl and $C_{1-3}$ haloalkyl; (6) $(CH_2)_k$-heterocycle optionally substituted with 1 to 3 groups independently selected from halogen, nitro, cyano, $OR^a$, $SR^a$, $C_{1-4}$ alkyl and $C_{1-3}$ haloalkyl wherein said heterocycle is selected from (a) a 5-membered heteroaromatic ring having a ring heteroatom selected from N, O and S, and optionally having up to 3 additional ring nitrogen atoms wherein said ring is optionally benzo-fused; (b) a 6-membered heteroaromatic ring containing from 1 to 3 ring nitrogen atoms and N-oxides thereof, wherein said ring is optionally benzo-fused; and (c) a 5- or 6-membered non-aromatic heterocyclic ring selected from

tetrahydrofuranyl, 5-oxotetrahydrofuranyl, 2-oxo-2H-pyranyl, 6-oxo-1,6-dihydropyridazinyl, (7) $C(O)_2R^a$, and (8) $C(O)NR^bR^c$;

$R^{6a}$ is selected from (1) $-OSO_2R^8$, (2) $-NR^{8a}SO_2R^9$, and (3) $-C(R^{8b})(R^{8c})SO_2R^9$;

$R^{6b}$, $R^{6c}$, and $R^{6d}$ are independently selected from (1) hydrogen, (2) halogen, (3) $OSO_2R^8$, (4) $C_{1-4}$ alkyl optionally substituted with 1 to 5 halogen atoms, (5) cyano, (6) nitro, (7) $OR^a$, and (8) $CO_2R^a$, or when attached to adjacent carbon atoms $R^{6c}$ and $R^{6d}$ together with the carbon atoms to which they are attached form a 5- to 8-membered saturated or unsaturated ring;

$R^7$ is selected from (1) hydrogen, (2) halogen, (3) cyano, (4) nitro, (5) $OR^a$, (6) $CO_2R^a$, (7) $C(O)NR^bR^c$, and (8) $C_{1-4}$ alkyl optionally substituted with 1 to 5 halogen atoms,

$R^8$ is selected from (1) $C_{1-4}$ alkyl optionally substituted with 1 to 5 halogen atoms, (2) $(CH_2)_k$-aryl optionally substituted with 1 to 3 groups independently selected from halogen, nitro, cyano, $NR^aC(O)R^a$, $OR^a$, $SR^a$, $CO_2R^a$, $C_{1-4}$ alkyl, $C_{1-3}$ haloalkyl and $NR^bR^c$, (3) $NR^bR^c$, and (4) hydrogen;

$R^{8a}$ is selected from hydrogen, $C_{1-4}$ alkyl optionally substituted with 1 to 5 halogen atoms, halogen, and $CO_2R^a$, or

when $R^{6a}$ and $R^{6b}$ are attached to adjacent atoms, $R^{8a}$ and $R^{6b}$ together complete 5- or 6-membered ring;

$R^{8b}$ and $R^{8c}$ are independently selected from hydrogen, $C_{1-4}$ alkyl optionally substituted with 1 to 5 halogen atoms, halogen, cyano, nitro, $CO_2R^a$, and $OR^a$;

$R^9$ is selected from (1) $C_{1-4}$ alkyl optionally substituted with 1 to 5 halogen atoms, (2) aryl optionally substituted with 1 to 3 groups independently selected from halogen, nitro, cyano, $NR^aC(O)R^a$, $OR^a$, $SR^a$, $CO_2R^a$, $C_{1-4}$ alkyl and $C_{1-3}$ haloalkyl, and (3) $(CH_2)_k$-aryl optionally substituted with 1 to 3 groups independently selected from halogen, nitro, cyano, $NR^aC(O)R^a$, $OR^a$, $SR^a$, $C(O)_2R^a$, $C_{1-4}$ alkyl and $C_{1-3}$ haloalkyl, or

$R^{8a}$ and $R^9$ together with the atoms to which they are attached form a 5- to 8-membered heterocyclic ring;

$R^a$, $R^b$ and $R^c$ are independently selected from (1) hydrogen, (2) $C_{1-4}$ alkyl optionally substituted with 1 to 5 halogen atoms, (3) phenyl optionally substituted with 1 to 3 groups selected from halogen, cyano, nitro, OH, $C_{1-4}$ alkyloxy, $C_{3-6}$ cycloalkyl and $C_{1-4}$ alkyl optionally substituted with 1 to 5 halogen atoms, and (4) $C_{3-6}$ cycloalkyl, or

$R^b$ and $R^c$ together with the nitrogen atom to which they are attached form a 4-, 5-, or 6-membered ring optionally containing an additional heteroatom selected from N, O, and S; or

$R^b$ and $R^c$ together with the nitrogen atom to which they are attached form a cyclic imide;

$R^d$ is selected from (1) $C_{1-4}$ alkyl optionally substituted with 1 to 5 halogen atoms, (2) $C_{1-4}$ alkyloxy, (3) phenyl optionally substituted with 1 to 3 groups selected from halogen, cyano, nitro, OH, $C_{1-4}$

alkyloxy, $C_{3-6}$ cycloalkyl and $C_{1-4}$ alkyl optionally substituted with 1 to 5 halogen atoms, and (4) hydrogen;

X is selected from CH and N;

Y is selected from C and S=O; and

k is selected from 0, 1, and 2.

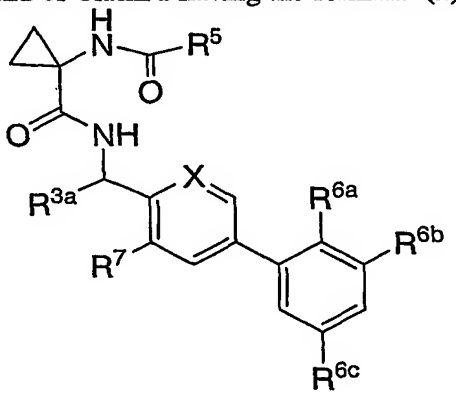
2. A compound of Claim 1 wherein $R^5$ is selected from pyrimidinyl and $C_{1-6}$ alkyl optionally substituted with 1 to 5 groups independently selected from halogen.

3. A compound of Claim 1 wherein Y is C.

4. A compound of Claim 1 wherein $R^{6a}$ is $OSO_2R^8$ and $R^8$ is selected from 2,2,2,-trifluoroethyl, trifluoromethyl, methyl, ethyl, propyl, isopropyl, phenyl, benzyl, and dimethylamino; or $R^{6a}$ is $NHSO_2R^9$ and $R^9$ is methyl or trifluoromethyl.

5. A compound of Claim 1 wherein $R^{6b}$ is selected from hydrogen, fluorine, and chlorine.

6. A compound of Claim 1 having the formula I(2):



I(2)

wherein X is N or CH, $R^{3a}$ is H or $C_{1-4}$alkyl, $R^7$ is hydrogen or halogen, and $R^5$, $R^{6a}$, $R^{6b}$ and $R^{6c}$ have the same definitions as provided in Claim 1.

7. A compound of Claim 6 wherein $R^{6a}$ is $NHSO_2R^9$; $R^9$ is $C_{1-4}$alkyl optionally substituted with 1 to 5 halogen atoms, $R^{6b}$ is halogen, and $R^{6c}$ is hydrogen or halogen.

8. A compound of Claim 10 wherein $R^{6a}$ is $OSO_2R^8$; $R^8$ is selected from methyl, trifluoromethyl, ethyl, propyl, isopropyl, benzyl, dimethylamino, 2,2,2-trifluoroethyl, and phenyl; $R^{6b}$ is hydrogen or halogen, and $R^{6c}$ is hydrogen or halogen.

9. A compound of Claim 10 wherein R5 is pyrimidinyl or $C_{1-4}$alkyl optionally substituted with 1 to 5 groups independently selected from halogen.

10. A compound selected from

3,3'-difluoro-4'-{[({1-[(pyrimidin-5-ylcarbonyl)amino]cyclopropyl}carbonyl)amino]methyl}-1,1'-biphenyl-2-yl trifluoromethanesulfonate,

3,3'-difluoro-4'-{(1R)-1-[({1-[(trifluoroacetyl)amino]cyclopropyl}carbonyl)amino]ethyl}-1,1'-biphenyl-2-yl trifluoromethanesulfonate,

3,3'-difluoro-4'-((1R)-1-{[(1-{[(trifluoromethyl)sulfonyl]amino}cyclopropyl)carbonyl]amino}ethyl)-1,1'-biphenyl-2-yl trifluoromethanesulfonate,

1-({[(1R)-1-(3,3'-difluoro-2'-{[(trifluoromethyl)sulfonyl]oxy}-1,1'-biphenyl-4-yl)ethyl]amino}carbonyl)-cyclopropanaminium trifluoroacetate,

3,3'-difluoro-4'-{(1R)-1-[({1-[(trifluoroacetyl)amino]cyclopropyl}carbonyl)amino]ethyl}-1,1'-biphenyl-2-yl methanesulfonate,

5-chloro-3,3'-difluoro-4'-{(1R)-1-[({1-[(trifluoroacetyl)amino]cyclopropyl}carbonyl)amino]ethyl}-1,1'-biphenyl-2-yl trifluoromethanesulfonate,

3,3'-difluoro-4'-{(1R)-1-[({1-[(trifluoroacetyl)amino]cyclopropyl}carbonyl)amino]ethyl}-1,1'-biphenyl-2-yl ethanesulfonate,

3,3'-difluoro-4'-{(1R)-1-[({1-[(trifluoroacetyl)amino]cyclopropyl}carbonyl)amino]ethyl}-1,1'-biphenyl-2-yl propane-1-sulfonate

3,3'-difluoro-4'-{(1R)-1-[({1-[(trifluoroacetyl)amino]cyclopropyl}carbonyl)amino]ethyl}-1,1'-biphenyl-2-yl propane-2-sulfonate,

3,3'-difluoro-4'-{(1R)-1-[({1-[(trifluoroacetyl)amino]cyclopropyl}carbonyl)amino]ethyl}-1,1'-biphenyl-2-yl benzenesulfonate,

3,3'-difluoro-4'-{(1R)-1-[({1-[(trifluoroacetyl)amino]cyclopropyl}carbonyl)amino]ethyl}-1,1'-biphenyl-2-yl phenylmethanesulfonate

3,3'-difluoro-4'-{(1R)-1-[({1-[(trifluoroacetyl)amino]cyclopropyl}carbonyl)amino]ethyl}-1,1'-biphenyl-2-yl dimethylsulfamate,
3,3'-difluoro-4'-{(1R)-1-[({1-[(trifluoroacetyl)amino]cyclopropyl}carbonyl)amino]ethyl}-1,1'-biphenyl-2-yl 2,2,2-trifluoroethanesulfonate,
3-chloro-3'-fluoro-4'-{(1R)-1-[({1-[(trifluoroacetyl)amino]cyclopropyl}carbonyl)amino]ethyl}-1,1'-biphenyl-2-yl trifluoromethanesulfonate,
3'-fluoro-4'-{(1R)-1-[({1-[(trifluoroacetyl)amino]cyclopropyl}carbonyl)amino]ethyl}-2-{[(trifluoromethyl)sulfonyl]oxy}-1,1'-biphenyl-3-yl trifluoromethanesulfonate,
N-(1-{[((1R)-1-{3,3'-difluoro-2'-[methyl(methylsulfonyl)amino]-1,1'-biphenyl-4-yl}ethyl)amino]carbonyl}cyclopropyl)pyrimidine-5-carboxamide,
N-(1-{[({3,3'-difluoro-2'-[(methylsulfonyl)amino]-1,1'-biphenyl-4-yl}methyl)amino]carbonyl}cyclopropyl)pyrimidine-5-carboxamide,
N-{1-[({[2'-(1,1-dioxido-1,2-thiazinan-2-yl)-3,3'-difluoro-1,1'-biphenyl-4-yl]methyl}amino)carbonyl]cyclopropyl}pyrimidine-5-carboxamide,
N-[(1R)-1-(3,3'-difluoro-2'-{[(trifluoromethyl)sulfonyl]methyl}-1,1'-biphenyl-4-yl)ethyl]-1-[(trifluoroacetyl)amino]cyclopropanecarboxamide,
N-[(1R)-1-(3,3'-difluoro-2'-{[(trifluoromethyl)sulfonyl]amino}-1,1'-biphenyl-4-yl)ethyl]-1-[(trifluoroacetyl)amino]cyclopropanecarboxamide, and
N-(1-{[((1R)-1-{3,3'-difluoro-2'-[(methylsulfonyl)amino]-1,1'-biphenyl-4-yl}ethyl)amino]carbonyl}cyclopropyl)pyrimidine-5-carboxamide.

11. A pharmaceutical composition comprising a therapeutically effective amount of a compound of Claim 1 and a pharmaceutically acceptable carrier.

12. Use of a compound of Claim 1 or a pharmaceutically acceptable salt thereof in the manufacture of a medicament for the treatment or prevention of pain and inflammation.

13. Use of Claim 30 wherein said pain is postherpetic neuropathy, osteoarthritis pain, or dental pain.